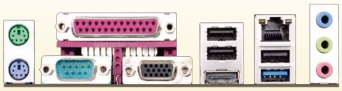
Q1900B-ITX

Intel® Quad-Core Celeron® Processor J1900 (Bay Trail)



Product Brief

- Intel® Quad-Core Celeron® Processor J1900 (Bay Trail)
- Solid Capacitor for CPU power
- Supports DDR3 1333 memory, 2 SO-DIMM slots
- 1 PCIe 2.0 x1
- Graphics Output Options : D-Sub, HDMI
- Built-in Intel® 7th generation (Gen 7) graphics, DirectX 11.0, Pixel Shader 5.0
- 1 x Printer Port, 1 x COM Port, 1 x COM Port Header
- 1 x USB 3.0, 5 x USB 2.0 (2 x Front, 3 x Rear), 2 x SATA2
- Realtek Gigabit LAN
- 5.1 CH HD Audio (Realtek ALC662 Audio Codec)
- Supports ASRock Full Spike Protection, A-Tuning, XFast LAN, XFast RAM, USB Key

Detail Specification

Platform	- Mini-ITX Form Factor - Solid Capacitor for CPU power - High Density Glass Fabric PCB
CPU	- Intel® Quad-Core Celeron® Processor J1900 (2 GHz)
Memory	- Dual Channel DDR3 Memory Technology - 2 x DDR3 SO-DIMM Slots - Supports DDR3 1333/1066 non-ECC, un-buffered memory - Max. capacity of system memory: 16GB
Expansion Slot	- 1 x PCI Express 2.0 x1 Slot
Graphics	- Intel® 7th generation (Gen 7) graphics - DirectX 11.0, Pixel Shader 5.0 - Dual graphics output: Support HDMI and D-Sub ports by independent display controllers - Supports HDMI Technology with max. resolution up to 1920x1200 @ 60Hz - Supports D-Sub with max. resolution up to 1920x1200 @ 60Hz - Supports Auto Lip Sync, Deep Color (12bpc), xvYCC and HBR (High Bit Rate Audio) with HDMI Port (Compliant HDMI monitor is required) - Supports HDCP with HDMI Port - Supports Full HD 1080p Blu-ray (BD) playback with HDMI Port
Audio	- 5.1 CH HD Audio (Realtek ALC662 Audio Codec) - Supports Full Spike Protection
LAN	- PCIE x1 Gigabit LAN 10/100/1000 Mb/s - Realtek RTL8111GR - Supports Realtek RealWoW! Technology - Supports Wake-On-LAN - Supports Full Spike Protection - Supports LAN Cable Detection - Supports Energy Efficient Ethernet 802.3az - Supports PXE
Rear Panel I/O	- 1 x PS/2 Mouse Port - 1 x PS/2 Keyboard Port - 1 x Parallel Port (ECP/EPP Support) - 1 x Serial Port: COM1 - 1 x D-Sub Port - 1 x HDMI Port - 3 x USB 2.0 Ports (Supports Full Spike Protection) - 1 x USB 3.0 Port (Supports Full Spike Protection) - 1 x RJ-45 LAN Port with LED (ACT/LINK LED and SPEED LED) - HD Audio Jacks: Line in / Front Speaker / Microphone
Storage	- 2 x SATA2 3.0 Gb/s Connectors, support NCQ, AHCI and Hot Plug

Connector	- 1 x 3W Audio AMP Output Wafer Header - 1 x COM Port Header - 1 x TPM Header - 1 x Chassis Intrusion Header - 1 x CPU Fan Connector (3-pin) - 1 x Chassis Fan Connector (3-pin) - 1 x 24 pin ATX Power Connector - 1 x Front Panel Audio Connector - 1 x USB 2.0 Header (Supports 2 USB 2.0 ports) (Supports Full Spike Protection)
BIOS Feature	- 64Mb AMI UEFI Legal BIOS with GUI support - Supports Plug and Play - ACPI 1.1 compliant wake up events - Supports jumperfree - SMBIOS 2.3.1 support
Support CD	- Drivers, Utilities, AntiVirus Software (Trial Version), Google Chrome Browser and Toolbar, Start8 (30 days trial)

Unique Feature	- ASRock A-Tuning
	- ASRock Instant Flash
	- ASRock XFast LAN
	- ASRock XFast RAM
	- ASRock Crashless BIOS
	- ASRock Internet Flash
	- ASRock Fast Boot
	- ASRock Restart to UEFI
	- ASRock USB Key
	- ASRock FAN-Tastic Tuning
	- Hybrid Booster:
	  - ASRock U-COP
	  - Boot Failure Guard (B.F.G.)
	- Good Night LED

Hardware Monitor	- CPU/Chassis temperature sensing - CPU/Chassis Fan Tachometer - CPU/Chassis Quiet Fan (Auto adjust chassis fan speed by CPU temperature) - CPU/Chassis Fan multi-speed control - CASE OPEN detection - Voltage monitoring: +12V, +5V, +3.3V, CPU Vcore
OS	- Microsoft® Windows® 8.1 32-bit / 8.1 64-bit / 8 32-bit / 8 64-bit / 7 32-bit / 7 64-bit
Certifications	- FCC, CE, WHQL - ErP/EuP ready (ErP/EuP ready power supply is required)
Accessories	- Quick Installation Guide, Support CD, I/O Shield - 2 x SATA Data Cables

The specification is subject to change without notice. The brand and product names are trademarks of their respective companies. Any configuration other than the original product specification is not guaranteed.

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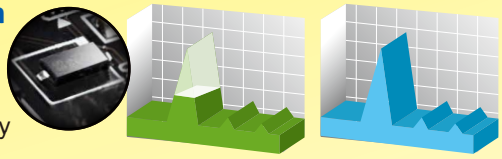
ASRock

FULL SPIKE PROTECTION

Surge Protection | Lightning Protection | ESD Protection

Surge Protection

Protects the motherboard from excessive currents from the power supply unit.



Protected from power surges and spikes

Unprotected

Lightning Protection

The onboard Realtek 8111GR LAN chip is protected against sudden and violent voltage spikes caused by lightning.

Anti-Lightning LAN IC | Traditional LAN IC

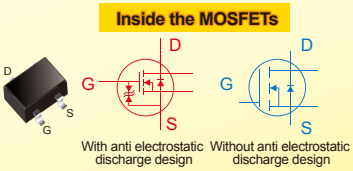
ESD Protection

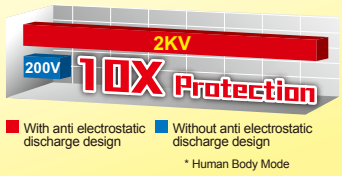
USB Added ICs to protect the onboard USB ports from electrostatic discharges.

For USB 2.0 For USB 3.0

LAN Prevents the onboard LAN from being damaged by electrostatic discharges.

MOSFETs MOSFETs in critical areas use a special anti electrostatic discharge design.

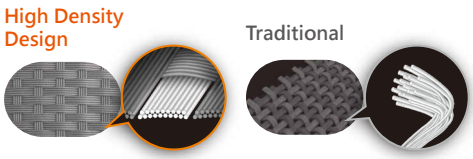




High Density Glass Fabric PCB

ASRock motherboards feature a new High Density Glass Fabric PCB design that reduces the gaps between the PCB layers to protect the mother-board against electrical shorts caused by humidity.

Short Circuit Protection Level



Intel® Quad-Core Celeron® Processor J1900 (Bay Trail)

Intel® Quad-Core Celeron® Processor J1900 brings whole new computing experiences to life with improved performance, lower power consumption, and new multimedia capabilities.

Fanless Design

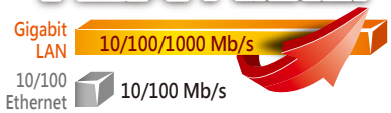
The CPU is covered by a specially designed heatsink which allows advanced heat dissipation. Utilizing an ultra quiet fanless design, this ASRock motherboard provides the most silent computing environment.

Gigabit LAN

This motherboard uses a Realtek gigabit LAN chip to support extremely fast internet connections.

Gigabit LAN v.s. 10/100 Ethernet

10X Faster



5.1 CH HD Audio

(Realtek ALC662 Audio Codec)

Supports 5.1 CH HD Audio so users may immerse in the realistic sound effects while gaming or playing multimedia content.

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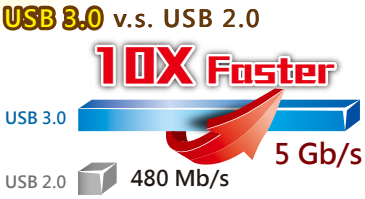
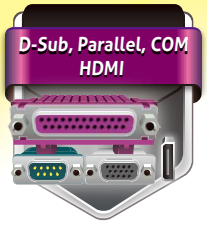
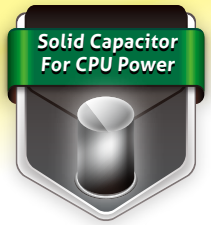
One USB 3.0 5Gb/s port for supporting all of your peripherals with fast data transfer speed.





Complete with all four types of most used connectors! Packed with a COM port + Printer port + D-Sub + HDMI combo. Plus the HDMI port supports Full HD 1080p Blu-ray (BD) playback.



ASRock uses solid capacitors for the CPU power on this motherboard. These solid capacitors bring long lasting durability and ultra stable performance.

A-Tuning

A-Tuning is ASRock's multi purpose software suite with a new interface, more new features and improved utilities, including XFast RAM and a whole lot more.

XFast RAM creates a virtual disk from the system memory to fully utilize the memory space. Shortening the loading time of visited websites and boosting the speed of applications such as Adobe Photoshop 5 times faster!

* Lower is better

ASRock XFast LAN provides faster internet access with LAN application prioritization, so that users may lower the latency in games or watch Youtube videos and download simultaneously.

■ ASRock motherboards with XFast LAN ■ Other motherboards without XFast LAN
Time latency in World of Warcraft

USB Key

Just plug in the USB Key and let your computer log in to windows automatically without having to type your username and password!

Fast Boot

With ASRock's exclusive Fast Boot technology, it takes less than 1.5 seconds* to logon to Windows 8 from a cold boot. No more waiting! The speedy boot will completely change your user experience and behavior.

*The boot time may vary with a different configuration.

Restart to UEFI

ASRock "Restart to UEFI" technology is designed for those requiring frequent UEFI access. It allows users to easily enter the UEFI SETUP automatically when turning on the PC next time.